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ABSTRACT OF THE DISCLOSURE

A method for determining bandwidth capacity of a test segment by sending one or more short packet bursts or streams from unique source smart nodes (SNs) over a link, which has the test segment, to one or more destination SNs. Selected source SNs send packet bursts or streams to other selected SNs at precise times so that the packet bursts or streams traverse the test segment simultaneously. Analyses of the traffic flow patterns at the destination SNs, including byte count measurements and time stamps, are used to determine the bandwidth capacity of the test segment.